

REMARKS

Claim 128 has been amended to correct typographical errors. No new matter has been added. Claims 69-77, 96-114 and 118-133 are pending. Claims 69 and 109 are independent.

Applicants thank the Examiner for indicating that claims 98, 99, 132 and 133 would be allowable

Rejections under 35 U.S.C. 102(e)

Claims 69-77, 96, 101, 104, 109-114, 119, 122 and 127-130 have been rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent No. 5,990,479 to Weiss *et al.* ("the '479 patent"), and U.S. Patent No. 6,423,551 to Weiss *et al.* ("the '551 patent"). Claims 69 and 109 are independent.

Independent claim 69

Applicants have discovered a method of detecting biological moieties. The method includes providing a plurality of compositions capable of characteristic spectral emissions allowing a sample containing or suspected of containing one or more biological moiety, allowing a sample containing or suspected of containing one or more biological moieties to interact with the compositions, and monitoring the spectral emission of each interaction between each composition. The composition includes a compound and a semiconductor nanocrystal associated with the compound. For each of the members of the plurality, the nanocrystal of the member of the plurality has an emission spectrum distinct from the other members of the plurality and a quantum yield of greater than 10% in water. See amended independent claim 69.

Neither the '479 patent nor the '551 patent describe a method in which a nanocrystal has a quantum yield greater than 10% in water. The Examiner contends that "such properties are inherent to the nanocrystal of Weiss et al since they are made by the same materials as those taught in the instant specification." See page 3 of the Office Action. However, neither the '479 patent nor the '551 patent describes a method in which **for each of the members of a plurality of compositions, the nanocrystal of the member of the plurality has an emission spectrum distinct from the other members of the plurality and a quantum yield of greater than 10% in water.** Neither the '479 patent nor the '551 patent describe a quantum yield of a nanocrystal in water, and certainly not for a each member of a plurality of compositions.

Accordingly, the '479 patent and the '551 patent do not anticipate independent claim 69, and claims that depend therefrom.

Independent claim 109

The Examiner has not addressed Applicants' previous argument that independent claim 109 is patentable over the '479 patent nor the '551 patent for a different reason. Indeed, independent claim 109 does not include a specific description of a quantum yield. Neither the '479 patent nor the '551 patent describes a method in which the compound of the member of the plurality has a corresponding biological moiety distinct from other biological moieties in the sample and is associated with the nanocrystal by a ligand having at least one linking group for attachment to the nanocrystal spaced apart from a hydrophilic group by an alkyl or alkenyl group. Accordingly, new independent claim 109, and claims that depend therefrom, are patentable over the cited references.

Applicants respectfully request reconsideration and withdrawal of this rejection.

CONCLUSION

Applicants respectfully ask that all claims be allowed.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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